Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Reorganization and Revision of	)	
Parts 1, 2, 21 and 94 of	)	WT Docket No. 94-148
the Rules to Establish a New	)	
Part 101 Governing Terrestrial	)	
Microwave Fixed Radio Services	)	

COMMENTS

AT&T Corp. ("AT&T") respectfully submits the following comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM"), FCC 94-314, released December 28, 1994.

For the most part AT&T supports the proposals in the NPRM to simplify and consolidate the domestic common carrier fixed radio rules in Part 21 (47 CFR Part 21) and the private operational fixed microwave rules in Part 94 (47 CFR Part 94) into a new Part 101 entitled Fixed Microwave Services. In particular, AT&T agrees that similar questions under the two present rule parts should be resolved in the same way (NPRM, ¶ 1).

AT&T submits, however, that the proposal in the Notice of Proposed Rulemaking in CC Docket 93-2 to allow applicants for licenses in the Point-to-Point Microwave Radio service to commence construction upon filing of a license application, subject to certain conditions (8 FCC Rcd. 1112 (1993)), should also be adopted here. Specifically, a decision in CC Docket 93-2 to adopt that proposal should be

treated as an amendment to Part 21 for the period prior to the effectiveness of new Part 101 and as part of Part 101 thereafter.

Other rule changes suggested by AT&T are discussed below, identified by the applicable proposed rule section in the NPRM:

§ 101.101

The NPRM (¶ 11) explains that this new Frequency Availability Chart, in addition to showing frequencies available for private and common carrier users, shows other services that share the band and notes that the chart is for the convenience of licensees and applicants. One other service that uses these bands is the Satellite Communications Service (Part 25). The usefulness of the chart would be improved if Part 25 frequencies were added.

§ 101.103 (d)(1)

This section of the frequency coordination procedures, tracking present §21.100(d)(1), provides for coordination with "existing users in the area" and "other applicants . . . whose facilities could affect or be affected by the new proposal." Because applicants may have no means of knowing about holders of special temporary authority, and because such holders may not be using the authority at the

time and place,[1] coordination with them often does not occur in advance. Potential conflicts may not emerge until the application is put on Public Notice.

This problem can be reduced, and timely cooperative resolution of conflicts fostered, if § 101.103(d)(1) were amended to provide for notification to holders of special temporary authority who have communicated their interest in receiving such notifications. Direct mailings to the frequency coordinators would be a good way to communicate such interest.

§ 101.103(d)(2)(i)

This section specifies that either or both of the two elements (notification and response) in the frequency coordination process may be written or oral. This conflicts in part with § 101.103(d)(2)(iv) which requires written response if potential interference is claimed and with § 101.103(d)(2)(vi), requiring written confirmation of an oral response to a request for expedited prior coordination. In addition to eliminating this inconsistency, AT&T suggests that the rule provide that all oral communications be confirmed in writing within 48 hours. This will reduce disputes about what was said and the potential need for the Commission to resolve

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[1] For example, AT&T has such authority nationwide, which it uses from time to time and place to place in emergency situations, to restore service, or for other purposes permitted by the rules.

such disputes.[2] AT&T also recommends clarification that electronic communication be permitted in addition to, or as a form of, written communication.

§ 101.103(d)(2)(ii)

The list contained in this section of the minimum technical details that must be provided at the notification stage should be expanded to include transmission line losses. The extent of such losses can have a significant effect on the performance and interference environment of a microwave system.

§ 101.103(d)(2)(v)

This section provides information on how to calculate the normal 30-day response time (§ 101.103(d)(2)(iv)) when notification is by mail and requires the notification to state the estimated expiration of the 30-day period when ordinary mail is used. If electronic communication is permitted, as AT&T proposes, this section should state that the 30-day response period begins when the electronic messaging system indicated that the message was received and should require that the expiration date be specified therein.

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[2] Although present §21.100(d)(2)(i) does not require written confirmation, the presence of many new entrants now makes such a requirement appropriate.

§ 101.103(d)(2)(xii)

Section 101.103(d)(1) recognizes that frequencies can be coordinated for future growth although there is no intent to use them in the near term.[3] Section 101.103(d)(2)(ii) goes on to provide that a licensee having reserved such a frequency must release it to a second licensee requiring that frequency if that second licensee cannot coordinate with another frequency not so reserved. In this regard, this section tracks its predecessor, present §21.100(d)(2)(xii). However, the new rule requires the first licensee to release only after six months have expired, unless it has during that six month interval filed to use the frequency, while the present rule requires immediate release. This new aspect to the rule would permit the first licensee to substantially delay the second, who might well be an actual or potential competitor. Therefore AT&T suggests that the immediate release provision of the existing rule be retained.

§§ 101.115(b) and (c)

These sections consolidate the directional antenna standards in Part 21 (§21.108) and Part 94 (§94.75). In doing so, however, new §101.115(c) applies the more stringent Part 94 standard, applicable in that Part from 1850 MHz to 2500 MHz, only from 1850 MHz to 1990 MHz. Thus, the looser standard in §101.115(b) applies from 1990 to 2500 MHz,

[3] This further supports AT&T's comment on §101.103(d)(1)(i) regarding coordination with interested parties.

including to the six available Part 101 frequency blocks identified in new § 101.101. The § 101.115(b) standard permits use of an antenna that is inefficient above 1850 MHz, resulting in inefficient use of the radio spectrum. AT&T recommends that § 101.115(b) be amended to apply only up to 1850 MHz and that the table in § 101.115(c) be expanded to apply between 1850 and 2500 MHz.

§ 101.143(b)

This section contains an equation for deriving the maximum Equivalent Isotropically Radiated Power (EIRP) of an antenna where the path length is shorter than the minimum path length specified in the table in § 101.143(a) for the particular frequency. That equation sharply reduces the available EIRP where the path length is just under the minimum. For example, if the path length is 17 kilometers or more § 101.113(c)[4] permits an EIRP of +45 dBW for frequencies between 1850 and 2690 MHz and +55 dBW for frequencies between 3700 and 11700 MHz. But if the path length is 16.9 kilometers,[5] the equation in § 101.143(b) limits the EIRP to +30 dBW. This very substantial difference in available

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[4] This section contains the EIRP limits at various frequencies where the path lengths are not shorter than those in § 101.143(b).

[5] For example, if the antennas must be placed on hilltops precisely that far apart.

power makes the communications path between these antennas much less reliable and much more subject to interference.

While a waiver can be sought "upon an appropriate technical showing" (§ 101.143(c)), the burden on licensees of applying for waivers and on the Commission staff of considering such applications will be much diminished if the equation were changed to make the reduction in maximum EIRP gradual as path lengths become shorter, in place of the abrupt break point in the proposed section. AT&T's suggested equation is:

$$EIRP = MAXEIRP - 20 \log [A/B] \text{ dBW}$$

where EIRP = Equivalent Isotropically Radiated Power
MAXEIRP = Maximum EIRP from the Table in § 101.113(a)
A = Minimum Path length from the Table in § 101.143(a) in kilometers
B = Actual path length in kilometers.

Section 101.713(c).

This section provides additional information on prior coordination by terrestrial microwave applicants with Earth Stations. It requires applicants to ascertain whether the beam of the proposed antenna intersects the beam of any Earth Station antenna within a specified rain scatter contour coordination distance,[6] provides that in general such intersections will not be permitted, and authorizes applicants

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[6] The reference in the first sentence to "paragraph (c) of this section" should be to "paragraph (a)."

to apply for waivers based on a showing that the intersection will not cause harmful interference.

Somewhat parallel, but less burdensome, requirements exist in Part 25 applicable in the reverse situation, i.e., coordination by Earth Station applicants with terrestrial microwave. Applicants must submit rain scatter coordination distance contour information (§ 25.203 (b)), must conduct an interference analysis (§25.256), and provide that analysis to terrestrial station licensees (§ 25.203(c)(2)). Although Part 25 says that beam intersections will not generally be permitted (§ 25.254(b)), there is no provision regarding waiver applications where intersections exist. Rather, § 25.203(c)(5) provides that the Commission, in the course of examining an application, may require additional information showing that harmful interference is not likely. AT&T suggests that Part 101 be conformed in this regard to Part 25.

Respectfully submitted

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